

BUFFALO GASOLINE MOTOR COMPANY

(INCORPORATED)

Catalogue Issued November 1st, 1901.



DEWITT, BRADLEY AND DANFORTH STS.,
BUFFALO, N. Y., U. S. A.

Posted June 2019 by Brian D. Szafranski of Elma New York USA.

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Announcement.

In presenting this, our latest catalogue, to the attention of the public, we wish to fully state our position and the services which we are prepared to render.

To those with whom we have had acquaintance, this may seem unnecessary, but to all we wish to state that we have considerably more than doubled our already extensive line and will immediately say, that our production covers everything and anything, either complete or in parts for the manufacture and sale of Gasolene Motors, Gasolene Powered Automobiles and Gasolene Powered Boats, including designing, building, equipping, furnishing and finishing complete, whether for pleasure, health or business. We give each and every detail our personal attention and best endeavors. Taking into consideration our vast experience, fine equipment of machinery, skilled designers with the best of mechanics, together with our high standard business reputation, it is immediately apparent that, without the least shadow of a doubt, we can serve you and in a way that will fully satisfy and please the most critical.

Respectfully tendered,

THE BUFFALO GASOLENE MOTOR CO.

We Claim

And will financially back up the following statements to the fullest extent:

We have perfection in the most vital point of a successful Explosive Motor, and that is our own system of ignition, which originated in our own works. Our ignition points are made from a special composition far better than platinum, and as they are riveted on in warts, 3-16 inches in diameter, they will not burn nor drop off during explosion. Please remember that we did not copy, but we originated this system; some of our competitors realizing our grand success with this system of ignition have started to copy. But stop for a moment! Compare the improvements, the difference in appearance, the workmanship and the material, also the difference in satisfaction given customers! Take into consideration that we are absolutely the first house producing a Four Cylinder Shifting Spark Motor, entirely eliminating vibration. Shifting spark allows changing of speed of Motor from 200 to 1,500 revolutions per minute on the sizes up to and including 7 H. P. and 12 H. P.: from 200 to 1,000 revolutions per minute.

On seeing our Motors run, notice the regular, measured, steady impulse—always right not fast one second and slow the next, but a good steady driving power. Our weight is just one-half of our competitors. Our Motors always start on $\frac{1}{4}$ turn, which is easily demonstrated at our works, and we have many credentials substantiating this claim. We run in any kind of weather without trouble. Our vaporizer is perfection.

We own and manufacture Patented Empire Gearless Transmissions, which are reliable and still simple. Having been on the market for three years, they have an excellent reputation and are used by unlimited numbers of satisfied customers.

HORIZONTAL OR VERTICAL 4 (Guaranteed) ACTUAL BRAKE HORSE POWER MOTOR.

With GOVERNOR to Prevent Racing of Motor While Working Light.

Double Cylinder, Non-Vibrating.

Speed Variation, 200 to 1500 rev. per minute.

Weight, Engine 165 lbs.; Fly Wheel 90 lbs.

Height, center of crank up, $20\frac{1}{2}$ in.; center of crank down, $4\frac{1}{2}$ in.

Width, $11\frac{3}{4}$ in.

Length, 16 in.

Length of shaft on ends 3 in. outside of everything.

Mechanically operated inlet valves.

Metal incased base.

Steel valves.

Steel crank shaft, $1\frac{1}{2}$ in. dia.

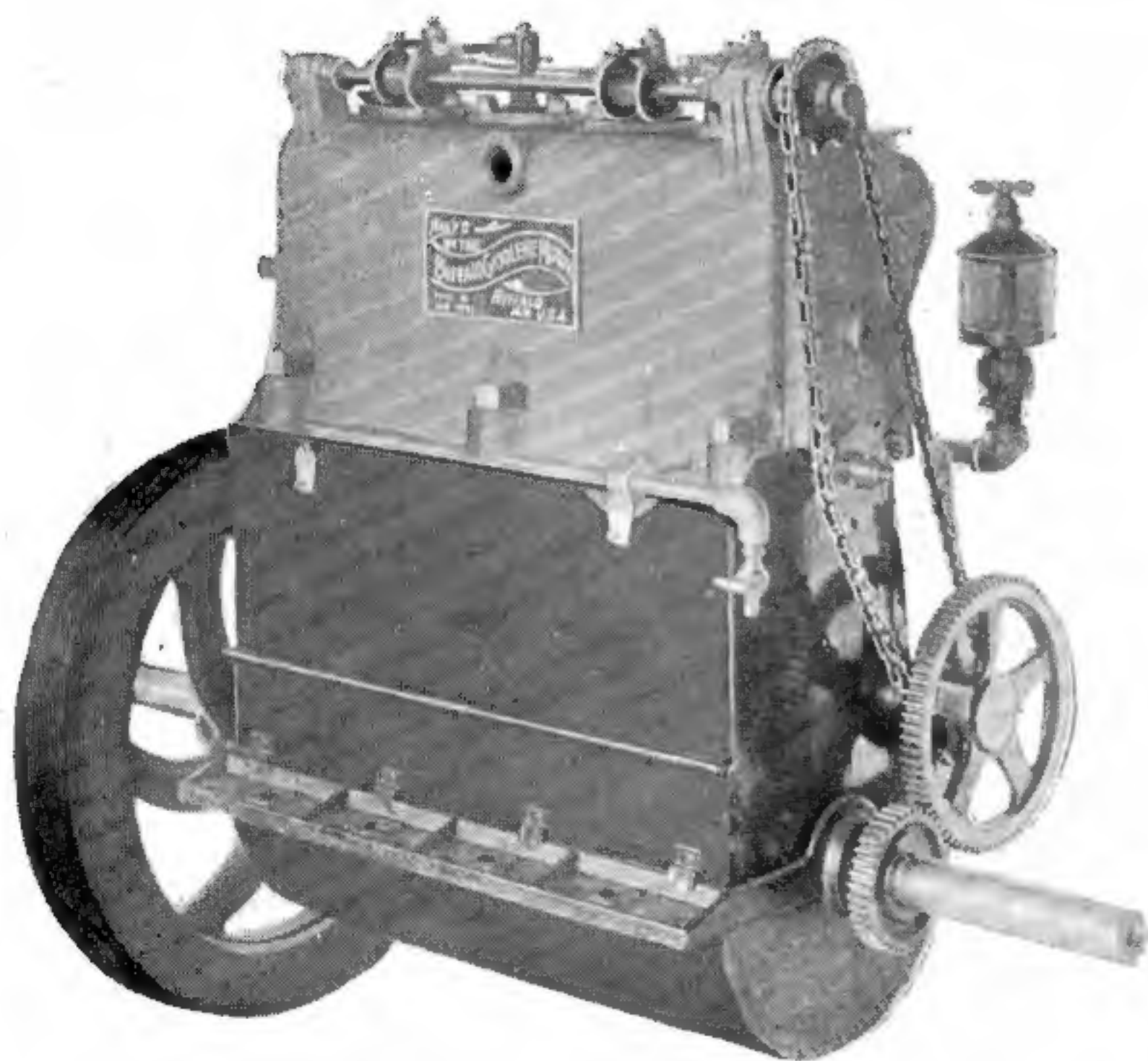
3 7-16 Bore x 5 in. Stroke.

Completely water jacketed including head and valves.

Double lock nuts and split keys throughout.

Price including Batteries, Coil, Switch Mufflers, Wrenches, Vaporizer
and Starting Crank, \$275.00.

HORIZONTAL OR VERTICAL 7 ACTUAL (Guaranteed) BRAKE HORSE POWER MOTOR.



Four Cylinder, Non-Vibrating.
Speed Variation, 200 to 1500 rev. per minute.
Weight, 225 lbs.
Fly Wheel, 90 lbs.
Height, center of crank up, 20 in.; center of
crank down, $4\frac{1}{2}$ in.
Width 14 in. Length 23 in.
Length of shaft on ends, $5\frac{1}{4}$ and 6 in. outside of
everything.
Mechanically operated inlet valves.
Metal incased base.
Steel valves.
Steel Cranks $1\frac{1}{4}$ in. dia.
3 7-16 bore x 5 in. stroke.
Completely waterjacketed including head.

Double lock nuts and split keys throughout.

Price with Batteries, Coil, Switch, Mufflers, Vaporizer and Starting Crank, \$400.00.

HORIZONTAL OR VERTICAL 12 ACTUAL (Guaranteed) BRAKE HORSE POWER MOTOR.

Four Cylinder non-vibrating.
Speed variation, 200 to 1000 rev. per
minute.

Weight, 355 lbs.

Fly Wheel, 120 lbs.

Height, center of Crank up, $20\frac{1}{2}$ in.;
center of Crank down, $4\frac{3}{4}$ in.

Width, 13 in.

Length, 27 in.

Length of shaft on ends 6 and 8 in.
outside of everything.

Mechanically operated inlet valves.

Metal encased base.

Steel Valves.

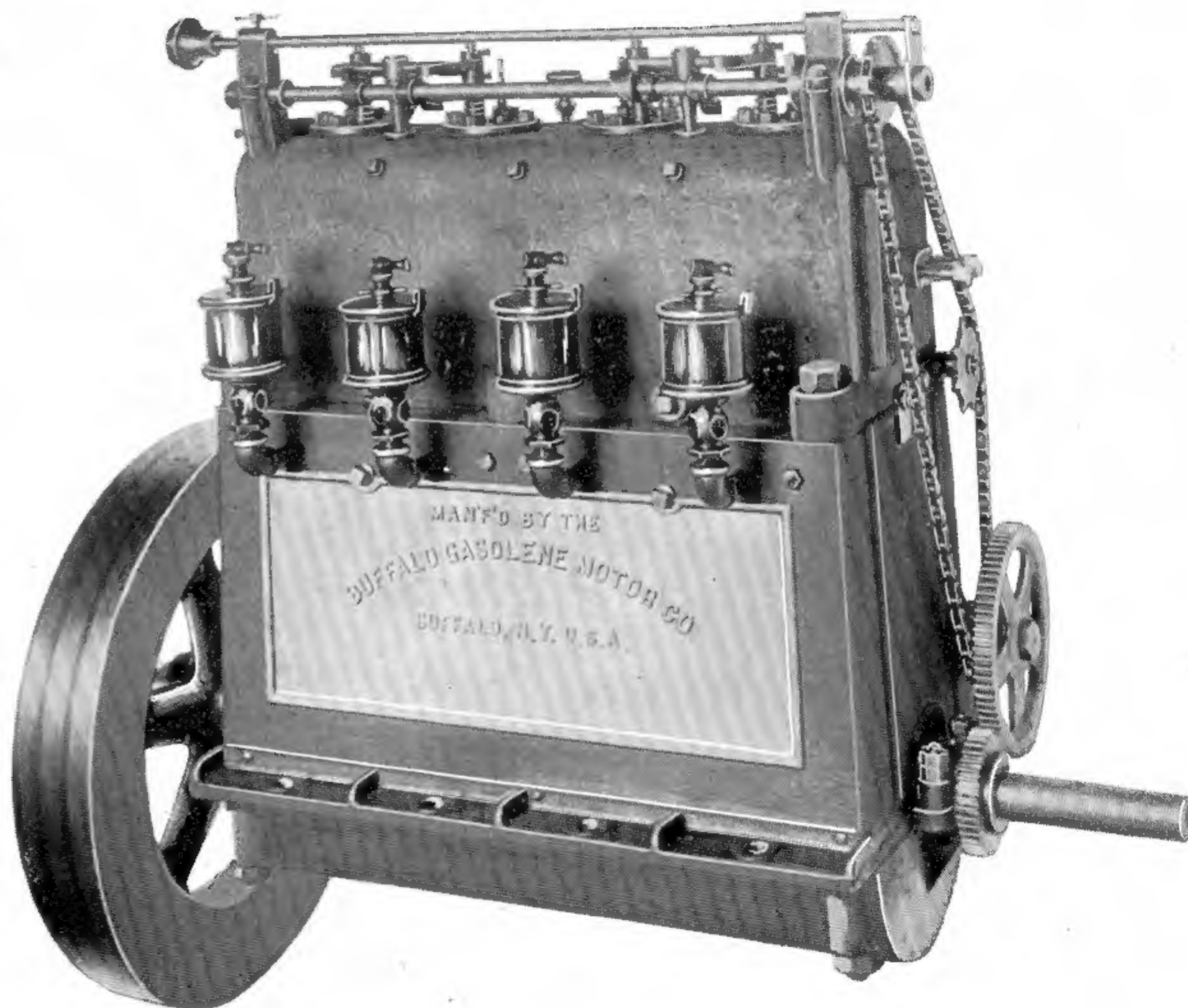
Steel Cranks $1\frac{1}{2}$ in. dia.

$4\frac{1}{4}$ bore x 5 in. stroke.

Completely waterjacketed including
head.

Double lock nuts and split keys
throughout.

Price with Batteries, Coil, Switch,
Mufflers, Wrenches, Vaporizer
and Starting Crank, \$600.00.



To Our Patrons

WE CAN SAY THAT ON ORDER WE BUILD

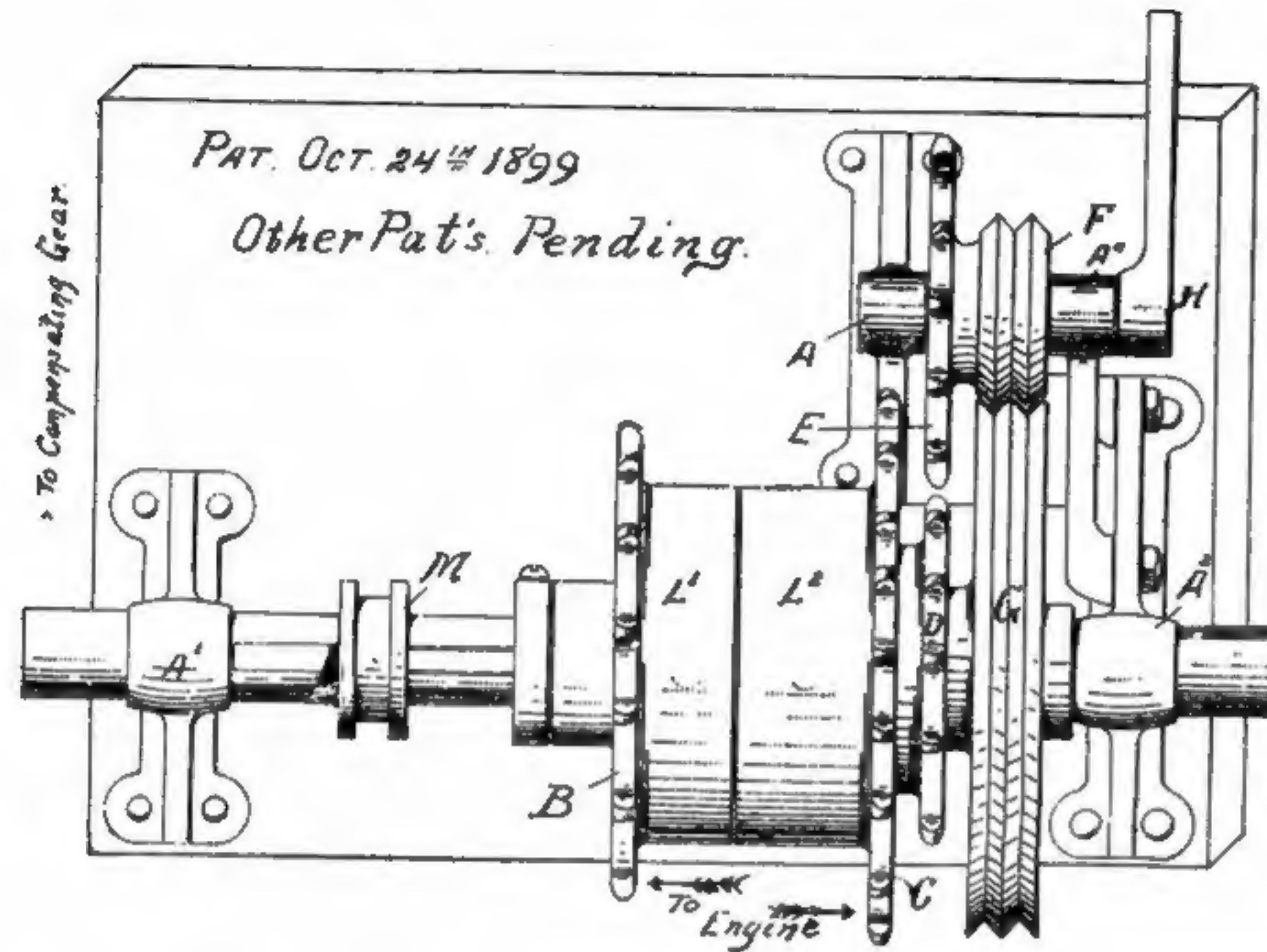
20, 40, 60 and 80 Horse Power

GAS AND GASOLENE MOTORS.

**FOR MARINE, STATIONARY AND
VEHICLE PURPOSES.**

*FULL INFORMATION, PARTICULARS AND BLUE PRINTS SUPPLIED UPON
REQUEST.*

DESCRIPTION.



EMPIRE two-speed forward and reverse transmission, absolutely no gears of any kind whatever; fully guaranteed to carry rated horse power and guaranteed against any defects. A-1, 2, 3, 4, are hangers fitted with bronze bearings. Hangers 2 and 3 are in one piece, solid. 4 is bolted tight on 2. L-2 is clutch for slow speed forward. L-1 is clutch for fast speed forward. The shells of these clutches are made male and female, the mechanism being inside, making it dust proof. These clutches need adjusting only once in six months. B and C are sprockets with chains running to motor shaft. $3\frac{1}{2}$ inches from centre to centre of sprocket. D, is a sprocket fastened tight to C, which rotates sprocket E, E being solid on F, which is set upon an eccentric. Lever H which is connected with foot pedal in front

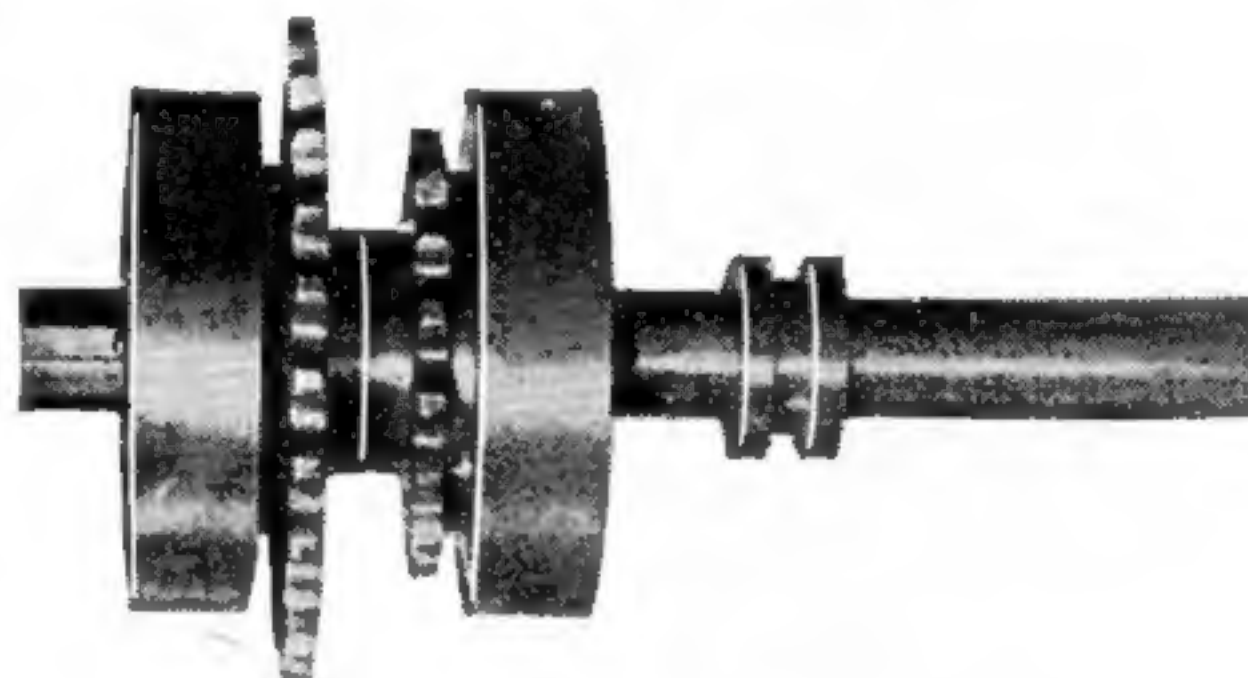
of carriage is operated frictionally on to G, rotating it in the opposite direction for the reverse which is very slow for backing from mud holes, etc. This friction is only used when backing. F is made of brass, G keyed tight on long shaft, L1 and L2 rotate loose on long shaft when engine runs and vehicle is stationary, and are thrown in and out for fast and slow speed forward, by shifting collar M back or forward. Can be started either slow or fast as operator may desire, X is opening in clutch shell for adjusting.

We make this set in the following sizes: 3 to 5 B. H. P., 45 pounds. 5 to 8 B. H. P., 64 pounds, at 500 revolutions per minute. Connect to compensating gear from either side or end of long shaft, which measures $14\frac{1}{2}$ inches from outside to outside of hangers, protruding $1\frac{1}{2}$ inches outside of hanger on each end. After it has been decided what end to use, the other can be cut off.

COMPLETE SET READY TO BOLT TO BODY OR RUNNING GEAR, PRICE \$75.00.

CUT SHOWS TRANSMISSION FOR TWO-SPEEDS FORWARD.

One clutch for high speed and one clutch for low speed or hill climbing. The clutches are mounted back to back with sprockets close together. $1\frac{1}{2}$ in. centers or



can be mounted with sprockets apart $3\frac{1}{2}$ in. centers. The clutch shells are then made male and female, making clutch mechanism more dust proof. Shaft as shown $13\frac{1}{2}$ inch long, clutches take up $5\frac{3}{4}$ in. on shaft, shifting collar $4\frac{1}{2}$ in. and space for bearing on each side. Complete set weighs 23 pounds.

PRICE, WITH SPROCKETS, \$45.00.

CUT SHOWS SMALL CLUTCH

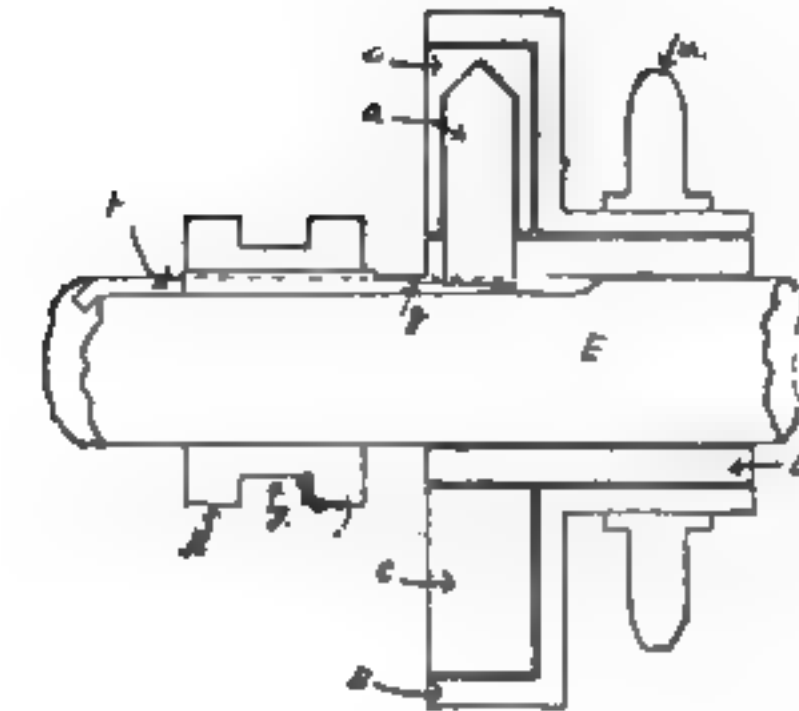
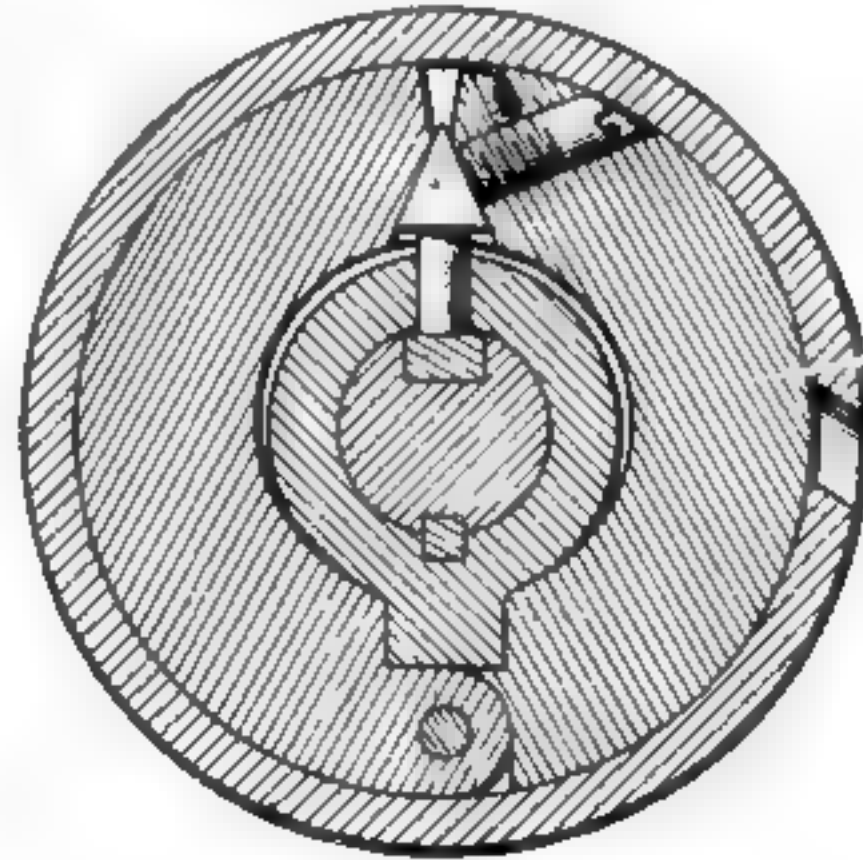
$3\frac{3}{4}$ inches in diameter, $2\frac{3}{4}$ in. wide, will carry $2\frac{3}{4}$ H. P. at 500 revolutions. Weight $5\frac{1}{2}$ pounds complete. For tricycles and quadricycles.

PRICE, WITHOUT GEAR OR SPROCKET ATTACHED
\$25.00.

Fig. 9.



Fig. 10.

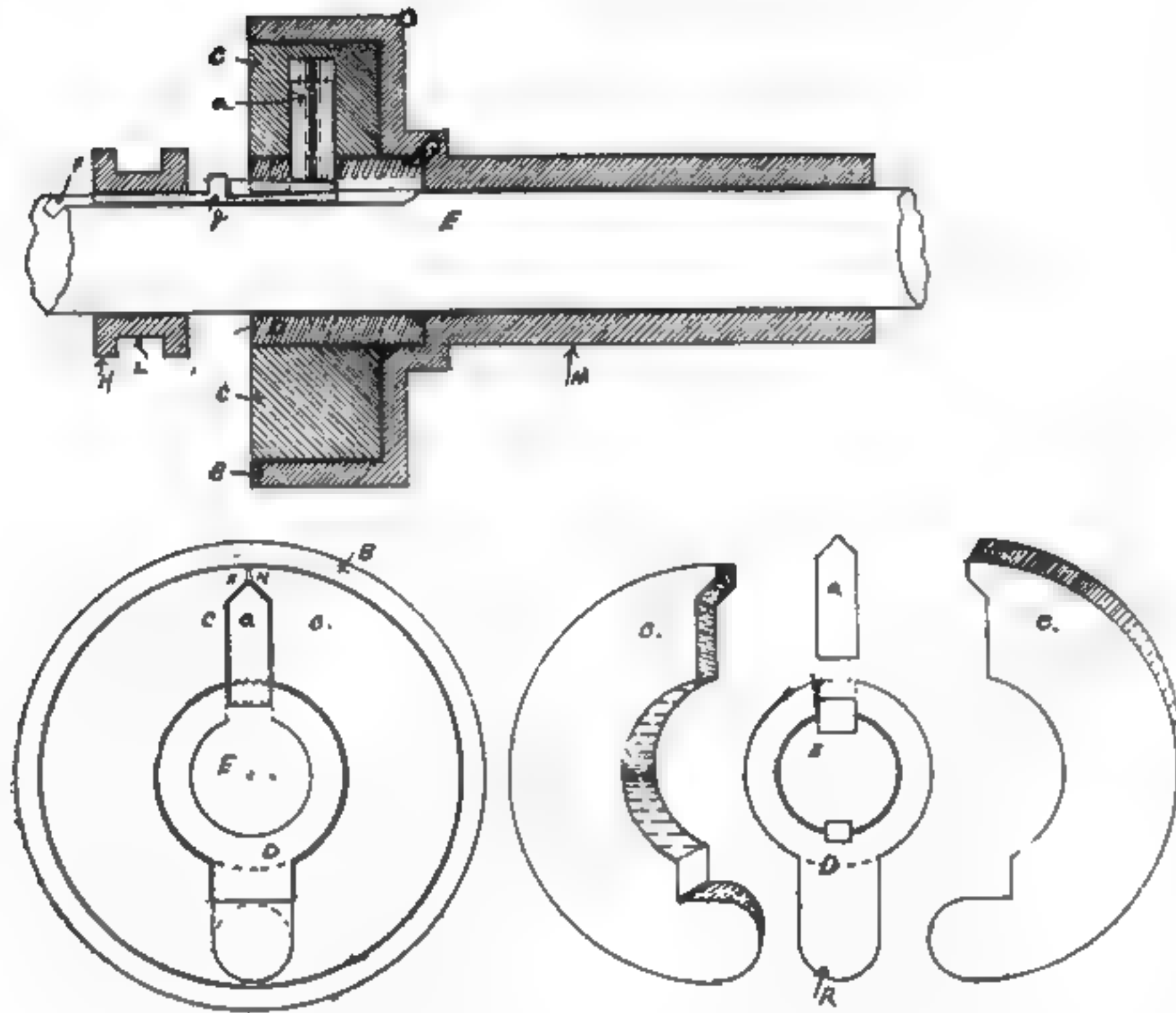


TO ADJUST CLUTCH.

When shifting collar travels full length of keyway, turn clutch shell until oblong hole comes opposite smallest screw, which release, turn shell to large screw, screw in about $\frac{1}{4}$ turn, then lock again with small screw, then clutch should bind when shifting collar moves one-half inch. Keep clutches well oiled.

EMPIRE SHAFT CLUTCH. From 5 to 100 H. P.

DESCRIPTION.



PATENTED OCTOBER 24, 1899. No. 635,603.

not shown in cut, and then the shaft can revolve and the outer disk "B" with the sprocket fastened on will stand still, allowing the engine to run and Shaft to stand still. Cut shows one clutch in sectional view, showing the few parts used in construction. It is the simplest Clutch on the market to-day and is fully guaranteed. Prices and discounts on application.

"D" is solidly keyed to shaft "E" and the two gripping shoes "C" "C" are hinged onto "D" at "R" and spreading pin "A" fits into Driver "D" and lays loosely between shoes "C" "C". "B" is a hollow disk with a bearing which revolves loosely on top of "D". "G" is a flat taper key which fits into a groove in shaft "E" loosely. "H" is the core which actuates Key "G" and shifting fork is fitted into groove in core "H" at "L". In moving collar "H" in toward the Clutch, collar "H" will drive Key "G" in and raises the spreading pin "A" up, forcing the two shoes "C" "C" outward against the inner wall of the hollow disk "B" on which is bolted the wood split pulley. In moving collar "H" away from the Clutch, the collar pulls the key away and the spreading pin "A" drops down and the shoes "C" "C" will close up away from the inner wall of disk "B" and are held together by a spring

DYNAMOS and PUMPS.

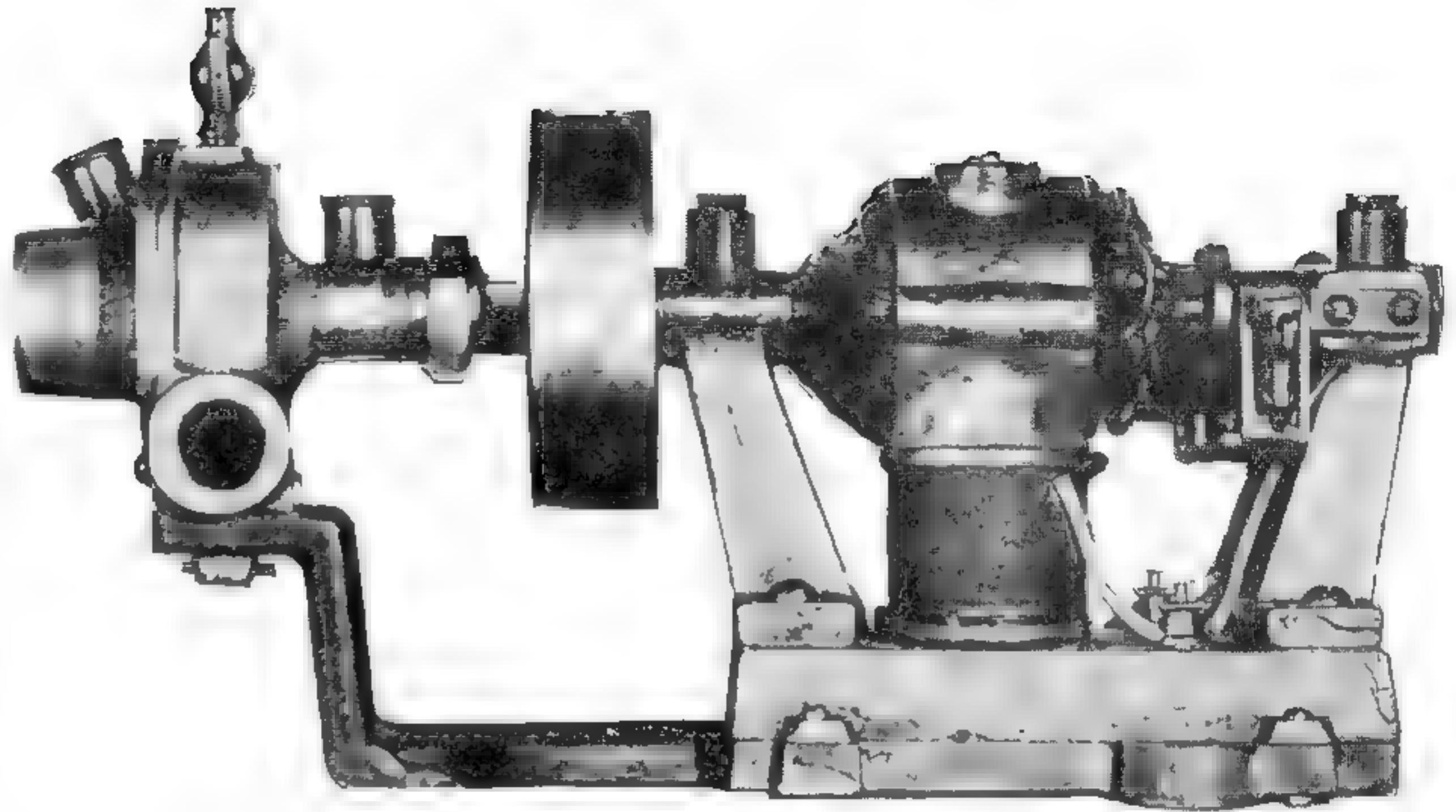
We can furnish either Pump or Sparking Dynamos, separate or mounted, as shown in illustration. When mounted, both are run with single belt direct onto Fly Wheel.

Price Pump,.....\$ 7.50
Price Dynamo 20.00
Price Pump and Dynamo ... 33.50
Mounted including Flange Pulley.

MIXING VALVE.

Able to start in all kinds of weather, and uses every drop of Gasolene.

PRICE, ALL BRASS, \$8.00.



CHAINS.

We can furnish upon short notice long and short lengths of any Standard Chains at reasonable Prices.

SPROCKETS.

To accomodate our customers we will say that we have an efficient assortment of all kinds of sprockets and at very reasonable prices.

OUR DEMONSTRATING LAUNCH, 26 x 6 Ft. 6 In. 7 H. P. MOTOR.



Our Marine Department can supply on short notice Reversing Gears, Reversing Propellers, Thrust Bearings, Ball Thrusts, in fact, anything to complete Marine Equipments.



30 FOOT LAUNCH OWNED BY D. W. FRICK, BUFFALO, N. Y.

Dr. T. S. Phillips of Buffalo, the well known yachtsman who spends the summer at Alexandria Bay, N. Y., reports as follows :—" Engine is in and turns up beautifully. All are crazy over it and predict a general dumping overboard of all others."



26 FT. LAUNCH OWNED BY MR. FILPOT, (formerly Mayor) OF NIAGARA FALLS, N. Y.

Mr. Filpot says: In the selection of my motor I must have a perfect piece of machinery, a motor that is positively reliable and runs under any and all weather conditions, as I use it almost daily, on the very verge of the rapids and a stopping of engine for twenty minutes would carry me over the Falls. He has now used our motor for over a year. Write him, asking his opinion.



*Showing space occupied by a 7 H. P. Motor in a
26-ft. Launch.*

CAMBRIDGE, MASS., October 4th, 1901.
Buffalo Gasolene Motor Co., Buffalo, N. Y.

GENTLEMEN:—We have had one of your transmissions on our carriage in constant use for three thousand miles, and we have not had to adjust it, which speaks very good for your work, as we have at various times purchased different makes of gears, and have had complaints from same, and we have yet to receive the first complaint from your gear, and we have used quite a number.

Yours very truly,
CREST MANUFACTURING CO.

MILFORD, CONN., September 24th, 1901.
Buffalo Gasolene Motor Co., Buffalo, N. Y.

GENTLEMEN:—Regarding our trip from Buffalo to Milford, Connecticut will say, "we enjoyed every mile of it, as the engine never refused to work. We stopped it in every lock to give it a chance to cool off, although it did not heat up at all. Saturday we made a run from Fiskill Landing on the Hudson to Huntington Bay on Long Island. Ready to recommend this engine to the public, I beg to remain

Yours very truly,
OSCAR L. BALDWIN,

RUNNING GEARS.

Only Body Radiator Water and Gasolene Tanks Needed to Make a Complete Vehicle.

SPECIFICATIONS:—7 B. H. P. Four Cylinder Motor. Gearless Transmission, giving two speeds forward and reverse; Revolving Rear Axle, or side drive; Heavy Roller Chair, side steering; Locking Brass Brakes; 1 $\frac{3}{8}$ " Axle; 2 $\frac{1}{2}$ " Pneumatic Tire, wood wheels, semi-elliptic springs; Motor Vertical, under seat.

With Shifting Spark, vehicle can be run at any speed desired up to twenty-five miles an hour and over, without changing air or gasolene. All iron work polished bright.

Dynamo, Rotary Pump, both mounted; 6 cells of Batteries, Coil, Switch, Mufflers, Starting Crank, Wrenches, all necessary levers.

Send for Blue Print and Photo.

Price, \$960.00.

HEAVY RUNNING GEARS to carry 10, 12 and 16 passengers. Full information with prices upon request.

RATCHET BRAKES.

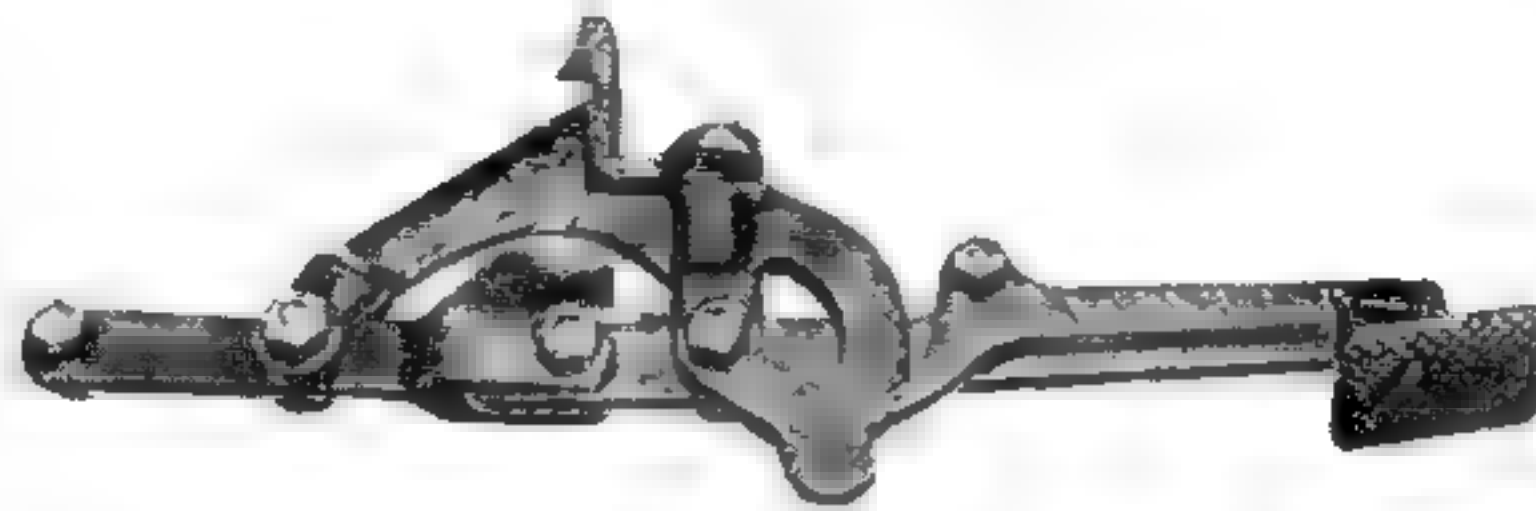
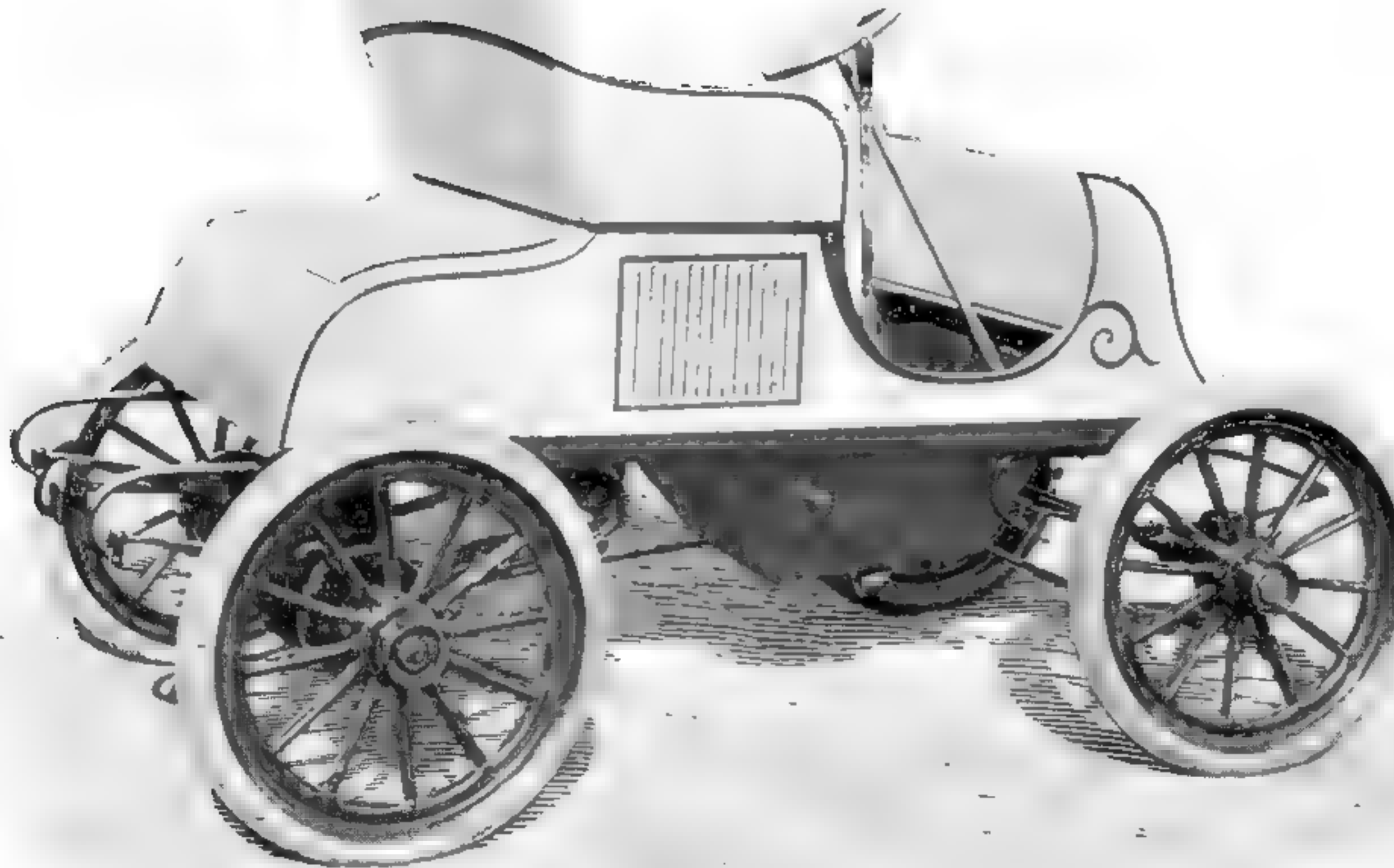


Illustration shows Braking apparatus which is very easily thrown on and off at will, or can be set to allow vehicle stopping on a grade and being held there by brake while owner is away from vehicle.

Price, Malleable Iron.....\$10.00.

RUN ABOUT.



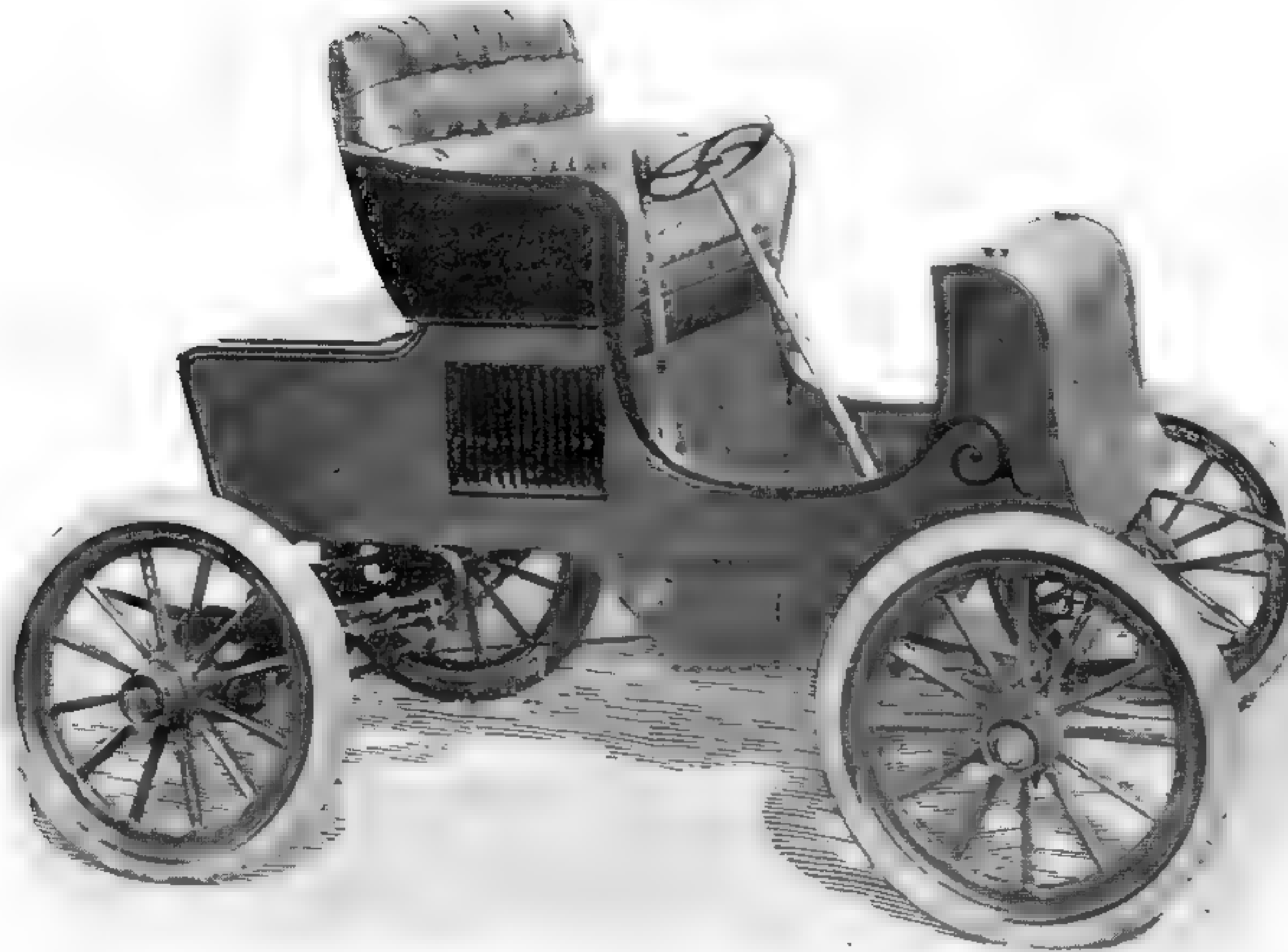
PRICE, \$1500.00

STYLE, A.

TOP, EXTRA.

Write for specifications, etc.

RUN ABOUT.



PRICE, \$1500.00.

STYLE, E.
Write for specification.

TOP, EXTRA.

DELIVERY VEHICLE.



PRICE \$1,700.00.

STYLE H.
Write for Specification.

MADE TO ORDER.

FRONT AXLE.



Illustration shows 1½ Ball Bearing Axles for vehicles weighing up to 1,500 lbs. without load. Notice pivot of yokes is as near the center as possible, which means no jar on steering lever. The Ball Bearing Boxes to match the spindle go with axles.

Price, - - - \$59.00.

WHEELS.

Wheels of all kinds and sizes furnished upon application, (excepting wire wheels.)

TIRES.

To accommodate our patrons we will furnish any standard make or size of tire.
Complete Differential Counter Shaft.

We can furnish complete jack-shaft for side drive vehicles, including hangers, sprockets, equalizing bars with right and left turn buckles, differential, collars, etc.

REAR AXLE.

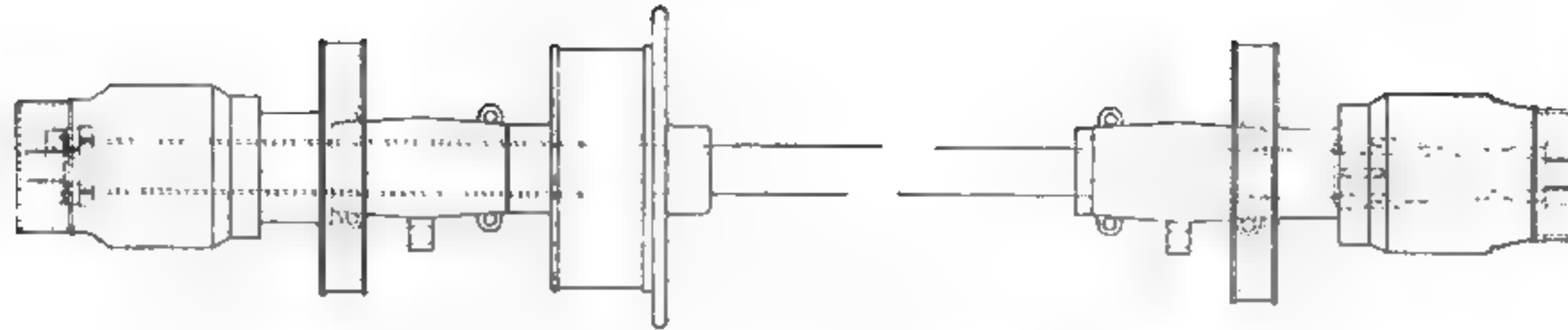


Illustration shows 1 $\frac{5}{8}$ " revolving or live axle. Please notice that this axle is not split in differential gear, but runs straight through from outside to outside of each wheel. One wheel is tight on solid axle and other upon sleeve.

Price including differential and boxes for wood wheels, all complete, including brake bands, \$67.00.

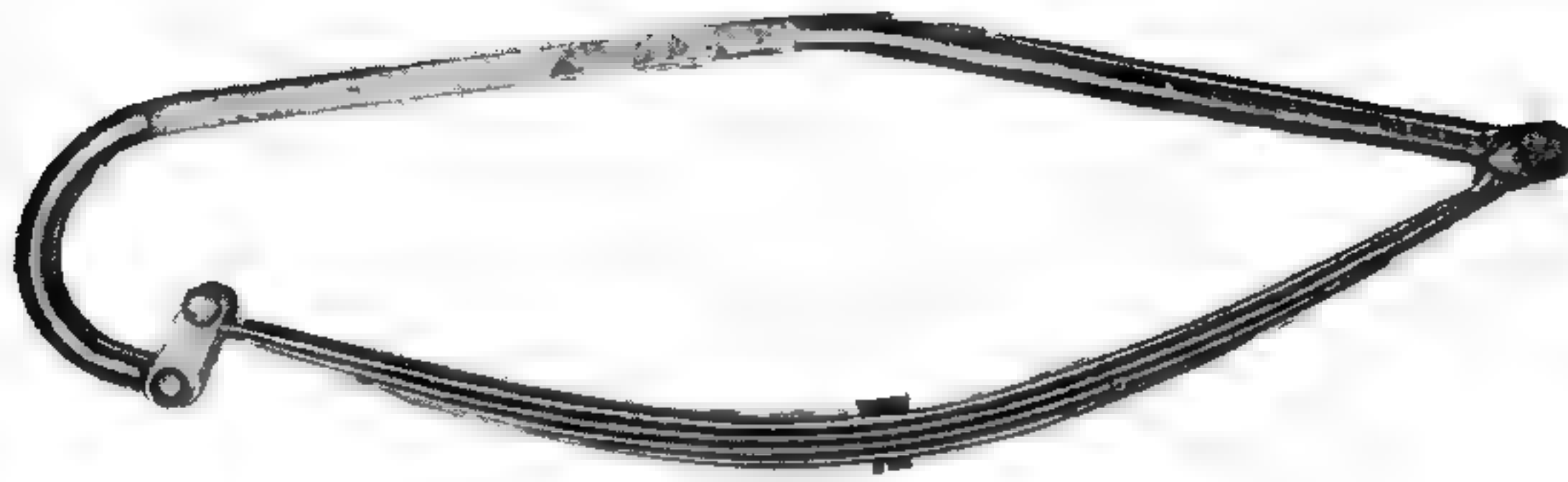
RIMS.

We will furnish any style steel rim to fit our wheels.

DRY BATTERIES.

Stand By 8" x 4"—This cell is adopted to all open circuit work, and comparative tests will show it to be superior to all other similar cells. It will stand shelf wear indefinitely.

PRICE, \$1.25.



FRONT SPRING AND BODY LOOP.

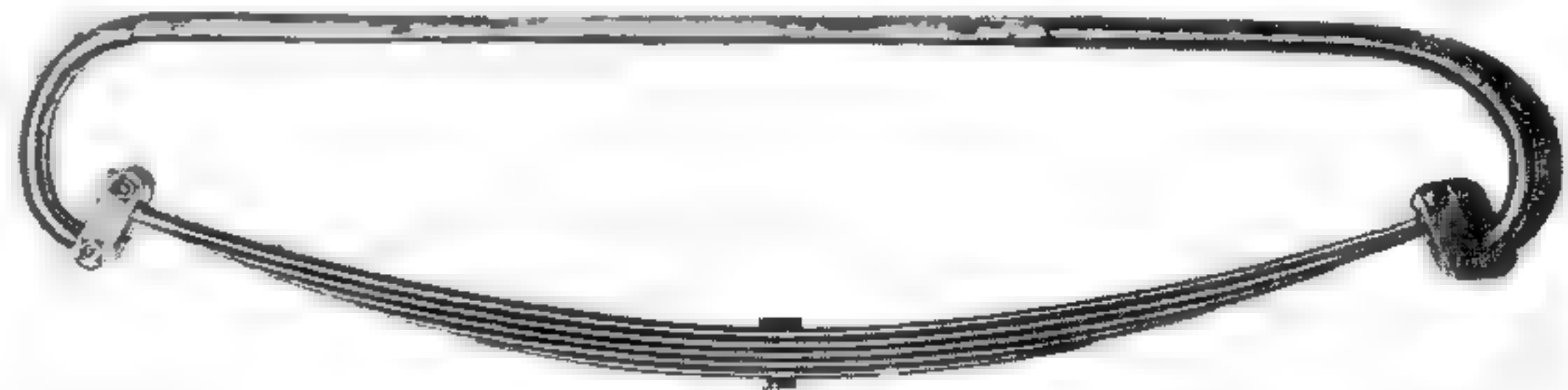
COMPENSATING GEARS.

Besides the illustration on preceding page, we are prepared to furnish a much

lighter Compensating Gear. Blue prints on application. Price \$25.00.

BODY LOOPS, WITH HALF SPRINGS.

Illustration shows a popular style of Semi-Elliptic Spring with the Body Loop. Made in almost any size wanted. Ask for full information.



REAR SPRING AND BODY LOOP.

Buffalo Gasolene Motor Co., Buffalo, N. Y.

GENTLEMEN:—The casting came this morning, and I want to thank you for your more than fair dealing. My previous experience with engine builders has been that I had to prove beyond a chance of a doubt that the break was the fault of the manufacturers and then have usually been called a liar and had to pay for the new part. In this case, I didn't claim anything or ask for a new piece, and here it came and no bill hitched to it. I assure you, I won't forget you. You sent me a better engine than I ordered, and I want to remark in the most emphatic language, that it is the best engine I ever had. I have used an automatic oil burning steam engine, a coal burning steam engine, a gasolene burning steam, 2 single cylinder, 2 cycle gasolene, 1 single cylinder 4 cycle gasolene and 2 double cylinder gasolene engines, and this is far ahead of any of them. It starts without cranking, in fact much easier than a so-called self-starting engine. I have never had to crank it but once, when the battery was played out and I had to crank it to get the dynamo to pick up. I have run it on two cells of batteries. Have never even seen the sparkers as they have not needed a particle of attention. When I got it, it looked so little and complicated that I was afraid of it, but I find it is really simplicity itself, and as to power, it sent my boat along with 20 passengers $10\frac{1}{2}$ miles up against a $4\frac{1}{2}$ mile current in an hour and 40 minutes, not deducting two stops to mend dynamo belt. I can slow it down to 100 revolutions or speed it up to 600. It doesn't seem to matter whether the weather is hot, cold or dry. It goes on $\frac{1}{4}$ turn every time.

To get even with you, I will gladly answer any inquiries if you see fit to refer any one to me.

Yours,

DR. W. P. HARTFORD,

CASSVILLE, WIS.

SILVER MEDAL...

HIGHEST FOR THIS CLASS

AWARDED....

BUFFALO FOUR CYLINDER
..GASOLENE MOTOR..

AT PAN-AMERICAN EXPOSITION

BUFFALO, N. Y., 1901.

RECOMMENDATIONS.

FROM V. L. EMERSON.

Buffalo Gasolene Motor Co., Buffalo, N. Y.

GENTLEMEN: I wired you last evening to procure for me if possible, a propeller in the rough, same pattern as the one shipped me, but about 20" in diameter and about 10" more pitch. I believe that the boat will go much faster with a wheel of this size. The engine races with the small wheel.

I will send you a check for the extras as soon as I receive your bill. The cabinet minister of marine has made an appointment for to-day. I send you clippings of the actual performance of the craft against a four-mile current, and another test will be made to-day before the government officials. The results show very conclusively that my model and the way of applying the power to the water is very near right. When I have got the boat completed to my satisfaction, I will give it such public notoriety as will bring you some business. Already I have a number of inquiries for the motors and have gone into correspondence with them. I will send you photographs of the arrangement of the boat.

Signed,

V. L. EMERSON.

(CLIPPING.)

TWENTY-SEVEN MILES PER HOUR.

REMARKABLE SPEED OF MR. EMERSON'S NEW CRAFT.

Prof. V. L. Emerson's new torpedo boat was given a trial yesterday on the Ottawa River, after having had several improvements made to the propeller. The boat was tried against the stream and attained a speed equal to 27 3-11 miles per hour, having gone against the stream course of 1½ miles in 2¾ minutes. For its size, this boat is claimed to be the fastest in the world.

FROM OTTAWA EVENING JOURNAL, WEDNESDAY, OCTOBER 9. 1901.

MR. TARTE IN A TORPEDO BOAT.

THE MINISTER OF PUBLIC WORKS WAS ASTONISHED AT THE SPEED OF THE LITTLE STEAMER.

Like a bird skimming over the water went Emerson's gasoline torpedo boat on the Ottawa River yesterday afternoon and the Hon. Mr. Tarte, Minister of Public Works, who was one of those on board, was delighted with the trip. Mr. Tarte accompanied by Lt.-Col. Gourdeau and Private Secretary Gelinas, visited Ratte's boathouse to see the boat give a trial of speed. As soon as the minister spied the boat he said she was a beautiful craft, and he looked sceptical when Mr. Emerson told him he could develop in the boat's engine about fifty horse power. The mechanism was fully explained and then the boat was shoved into the water.

Mr. Emerson suggested that Mr. Tarte stay at the boathouse while the boat was taken out in the stream for a trial run.

"I shall go out now," said Mr. Tarte. "I want to see her go while I am in it." A few minutes later, Mr. Tarte was away down stream and, then, as the boat swiftly came up stream against the current toward the boathouse the minister waved his hat at the friends on shore. All the party were then taken on board and given a fast run down stream to near Kettle Island, and Mr. Emerson showed how easily the boat could be turned and how fast she could go when all the power was on. The boat easily developed a speed of over twenty miles an hour and Col. Gourdeau said: "It is like a thing of life."

A SPLENDID BOAT.

"It is a splendid boat," said Mr. Tarte. "I have never seen anything like it in my life." He was convinced about the power of the gasoline engine.

"It was the pleasantest experience I ever had on the water," remarked Col. Gourdeau, and when Mr. Emerson and his engineer went out in the boat alone and made the craft go at top speed the party on shore applauded warmly as the boat sped away and then quickly returned.

Mr. Tarte appeared to enjoy the trip to the utmost and he had the boat tested in many ways. All the tests were passed satisfactorily. The boat can be run at a slow rate or faster than anything on the river. It can be stopped in a few feet and is so responsive to the rudder that it turns quickly from its course to avoid obstructions. Although it went broadside over the high swell raised by the steamer Victoria, the little torpedo boat sailed beautifully, and when the Victoria appeared to be going full speed, the little boat steamed by it as easily as possible. It appeared to go twice as quickly as the Victoria, which is one of the fastest passenger boats on the Ottawa.

Mr. Emerson is going to make some changes in the boat, by which he hopes to make it go much faster. He intends to race on Lake St. Clair with the boat next year.

The Buffalo Gasoline Engines are the good kind. Look 'em up!

FROM OTTAWA FREE PRESS, OCTOBER 8, 1901.

SPEEDY CRAFT.

Mr. V. L. Emerson had another run with his torpedo boat yesterday after a few alterations he had made during the week. The boat developed phenomenal speed and over a measured course of $1\frac{1}{4}$ miles, did the distance in $2\frac{3}{4}$ minutes, a rate of 27 3-7 miles an hour. This trial was against the current of the Ottawa, which at this point runs about 4 miles an hour, and Mr. Emerson firmly believes that he can run 30 miles an hour in calm water. He gave a party of canoeists a very exciting ride from the Queen's wharf to Besserer's grove, they being very anxious to have a tow behind the swift little craft. When the boat started and left only the stern of the canoe in the water the boys began to get anxious. When they got to the grove soaked to the skin and their faces gaunt from the exciting strain on their nerves, politely declined to be towed back.

Mr. Emerson considers there is not enough sport racing the craft on the Ottawa, and intends locking his boat into the canal where he will try conclusions with the Montreal Limited from the Central depot to the Deep Cut. He intends building a craft 40 feet long with about 10 times the horse power, and expects it to run within 40 miles an hour and compete with such boats as the Turbina.

There is no doubt that this boat is the fastest of its size in the world and Mr. Emerson is getting correspondence from all over the continent asking for description of it.

Four Cylinders and Shifting Spark is original with us. How about copyists?

GUARANTEE.

We guarantee our entire production for one year against defects, and will replace free all defective parts returned to our works, transportation charges paid, within one year from date of purchase.

TERMS.

25% deposit with order and the balance when goods are ready for shipment, or shipped sight draft attached against bill of lading for balance.

Prices quoted are always F. O. B. Buffalo, N. Y., and including boxing or crating.

BUFFALO GASOLENE MOTOR CO.,

Dewitt, Bradley and Danforth Streets, Buffalo, N. Y., U. S. A.

To reach factory—Take Niagara Street car, transfer to Forest Avenue car, get off at Dewitt Street, walk one block north.

G. M. HAUSAUER & SON,
PRINTERS,
CAXTON BLDG., BUFFALO, N. Y.